



Governor

Lori F. Kaplan
Commissioner

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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(800) 451-6027
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May 13, 2003

Mr. Solomon Graber
Tippman - Graber Cabinet Co. LLC
dba Cabinets by Graber, Inc.
15202 Grabill Road
Grabill, IN 46741

Re: 003-16798-00304
First Minor Permit Revision to
MSOP 003-11152-00304

Dear Mr. Graber:

Cabinets by Graber, Inc., was issued a New Source Construction and Minor Source Operating permit on October 26, 1999, for a wooden cabinet surface coating and composite counter top manufacturing source. A letter from Barnes Consulting Services, LLC requesting a permit revision was received by the Office of Air Quality (OAQ) on February 11, 2003. Pursuant to the provisions of 326 IAC 2-6.1-6 a minor permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of addition of the following emission units and pollution control devices:

- (a) One (1) paint booth, identified as PB4, utilizing airless spray guns to coat a maximum of 2.79 wood units per hour, utilizing dry filters for particulate control, exhausting to stack P4;
- (b) One (1) natural gas fired air make-up unit with a heat input rating of 2.9 million British thermal units (MMBtu) per hour; and
- (c) Five (5) natural gas fired radiant tube heaters each having a heat input rating of 0.15 MMBtu per hour.

The following construction conditions are applicable to the proposed project:

- 1. The data and information supplied with the application shall be considered part of this permit revision approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
- 2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
- 3. Pursuant to IC 13-15-5-3, this approval to construct becomes effective upon its issuance.



4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-6.1-6, the minor source operating permit is revised by incorporating the minor permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please find enclosed the revised permit documents which include this letter, TSD, emission calculations, and revised permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Michael Hirtler, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or at 973-575-2555, extension 3229, or in Indiana at 1-800-451-6027.

Sincerely,
Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

MH / EVP

c: File - Allen County
Allen County Health Department
Air Compliance Section - Jennifer Dorn
Compliance Data Section - Karen Nowak
Administration and Development
Technical Support and Modeling - Michele Boner
Dennis Barnes, Barnes Consulting Services, LLC



O'Bannon
Governor

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NEW SOURCE CONSTRUCTION PERMIT and MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

**Tippman - Graber Cabinet Co. LLC
dba Cabinets by Graber, Inc.
15202 Grabill Road
Grabill, IN 46741**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 003-11152-00304	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: October 26, 1999 Expiration Date: October 26, 2004

Exemption No.: 003-11747-00304, issued on February 2, 2000
First Notice Only Change No.: 003-16565-00304, issued on October 4, 2002

First Minor Permit Revision No.: 003-16565-00304 Pages Affected: 2-5, 17-19	
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: May 13, 2003



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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary wooden cabinet surface coating and composite countertop manufacturing operation.

Authorized Individual: Plant Manager
Source Address: 15202 Grabill Road, Grabill, IN 46741
Mailing Address: P.O. Box 539, Grabill, IN 46741
Phone Number: 260-627-2243
SIC Code: 2434
County Location: Allen
County Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit
Minor Source, under PSD Rules

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) Four (4) paint booths, identified as PB1, PB2 and PB3, constructed in October 1999, and PB4, to be constructed in April 2003, each equipped with airless spray guns, coating a combined maximum of 2.79 wood units per hour, utilizing dry filters for particulate overspray control, and each exhausting from one stack respectively identified as P1, P2, P3, and P4;
- (b) One (1) counter top manufacturing operation, consisting of the following:
 - (1) six (6) forming tables for pouring resins;
 - (2) sanding and trimming area, utilizing an air purifier for particulate control.
- (c) Three (3) No. 1 distillate oil fueled heaters, identified as H1, H2, and H3, each rated at 0.125 million British thermal units (MMBtu) per hour, each exhausting at one (1) stack, identified as H1, H2, and H3, respectively;
- (d) One (1) No. 1 distillate oil fueled dryer, identified as D4, rated at 0.165 million British thermal units (MMBtu) per hour, exhausting at one (1) stack, identified as D4;
- (e) Miscellaneous saws/sanders/wood trimming equipment, with a maximum capacity of 100 pounds per hour off wood, utilizing a baghouse and cyclone collection system for particulate control and exhausting to the interior of the building;
- (f) One (1) propane unit heater with a maximum heat input rate of 0.175 million British Thermal Units per hour;

- (g) One (1) natural gas fired air make-up unit with a heat input rating of 2.9 million British thermal units (MMBtu) per hour; and
- (h) Five (5) natural gas fired radiant tube heaters each having a heat input rating of 0.15 MMBtu per hour.

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

All requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emissions units were constructed as proposed in the application. The emissions units covered in the New Source Construction Permit may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

- (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

C.1 Minor Source Status [326 IAC 2-7] [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of all criteria pollutants is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) The total source potential to emit of any individual hazardous air pollutant (HAP) is less than 10 tons per year, and the total source potential to emit of any combination of HAPs is less than 25 tons per year, therefore, the requirements of 326 IAC 2-7 (Part 70 Permit Program) will not apply.
- (c) Any change or modification which may increase potential to emit of any regulated pollutant to 100 tons per year from this source, shall cause this source to be considered a major source under 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.
- (d) Any change or modification which may increase potential to emit of any individual HAP to 10 tons per year or any combination of HAPs to 25 tons per year from this source, shall cause this source to be considered a major source under 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of [326 IAC 2-6.1-6] whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
 - (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
 - (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
 - (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
- (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAQ, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAQ, nor an authorized representative, may disclose the information unless and until IDEM, OAQ, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

- (2) The Permittee, and IDEM, OAQ, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

Testing Requirements

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date. The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.11 Maintenance of Monitoring Equipment [IC 13-14-1-13]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.15 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.16 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.17 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall

briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-Annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) A malfunction as described in 326 IAC 1-6-2; or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) Four (4) paint booths, identified as PB1, PB2 and PB3, constructed in October 1999, and PB4, to be constructed in April 2003, each equipped with airless spray guns, coating a combined maximum of 2.79 wood units per hour, utilizing dry filters for particulate overspray control, and each exhausting from one stack respectively identified as P1, P2, P3, and P4;
- (b) One (1) counter top manufacturing operation, consisting of the following:
 - (1) six (6) forming tables for pouring resins;
 - (2) sanding and trimming area, utilizing an air purifier for particulate control.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Any change or modification, from the one (1) composite counter top operation that would increase the potential VOC emissions to more than 25.0 tons per year, shall obtain approval from the Office of Air Quality (OAQ), as required by 326 IAC 2-1.1 before such change can occur.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the four (4) paint booths, identified as PB1, PB2, PB3, and PB4 shall utilize one of the following application methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.1.3 Particulate [326 IAC 6-3-2(d)]

- (a) Particulate from the surface coating at PB1, PB2, PB3, and PB4 shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

- (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for, the four (4) paint booths, identified as PB1, PB2, PB3, and PB4, and any control devices.

Compliance Determination Requirements

There are no specific compliance determination requirements applicable to these facilities.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

There are no specific compliance monitoring requirements applicable to these facilities.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

There are no specific record keeping or reporting requirements applicable to these facilities.

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (c) Three (3) No. 1 distillate oil fueled heaters, identified as H1, H2, and H3, each rated at 0.125 million British thermal units (MMBtu) per hour, each exhausting at one (1) stack, identified as H1, H2, and H3, respectively;
- (d) One (1) No. 1 distillate oil fueled dryer, identified as D4, rated at 0.165 million British thermal units (MMBtu) per hour, exhausting at one (1) stack, identified as D4;
- (e) Miscellaneous saws/sanders/wood trimming equipment, with a maximum capacity of 100 pounds per hour off wood, utilizing a baghouse and cyclone collection system for particulate control and exhausting to the interior of the building;
- (f) One (1) propane unit heater with a maximum heat input rate of 0.175 million British Thermal Units per hour;
- (g) One (1) natural gas fired air make-up unit with a heat input rating of 2.9 million British thermal units (MMBtu) per hour; and
- (h) Five (5) natural gas fired radiant tube heaters each having a heat input rating of 0.15 MMBtu per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the miscellaneous saws/sanders/wood trimming equipment shall not exceed 0.55 pounds per hour when operating at a process weight rate of 100 pounds per hour.

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF Air Quality
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?____, 25 TONS/YEAR SULFUR DIOXIDE ?____, 25 TONS/YEAR NITROGEN OXIDES?____, 25 TONS/YEAR VOC ?____, 25 TONS/YEAR HYDROGEN SULFIDE ?____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?____, 25 TONS/YEAR FLUORIDES ?____, 100TONS/YEAR CARBON MONOXIDE ?____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: Tippman - Graber Cabinet Co. LLC dba Cabinets by Graber, Inc. PHONE NO. (260) 627-2243

LOCATION: (CITY AND COUNTY) Grabill, IN Allen County

PERMIT NO. 003-11152 AFS PLANT ID: 003-11152 AFS POINT ID: _____ INSP: Jennifer Schick

CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/19____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/19____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

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**Please note - This form should only be used to report malfunctions
applicable to Rule 326 IAC 1-6 and to qualify for
the exemption under 326 IAC 1-6-4.**

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Tippman-Graber Cabinet Co. LLC
dba Cabinets by Graber, Inc.
Grabill, IN
Permit Reviewer:PR / EVP

Minor Permit Revision 003-16798-00304
Revised by: MH / EVP

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Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Minor Permit Revision to a Minor Source Operating Permit

Source Background and Description

Source Name:	Tippman - Graber Cabinet Co. LLC dba Cabinets by Graber, Inc.
Source Location:	15202 Grabill Road, Grabill, Indiana 46741
County:	Allen
SIC Code:	2434
Operation Permit No.:	MSOP 003-11152-00304
Operation Permit Issuance Date:	October 26, 1999
Minor Permit Revision No.:	003-16798-00304
Permit Reviewer:	Michael Hirtler / EVP

The Office of Air Quality (OAQ) has reviewed a revision application from Tippman - Graber Cabinet Co. LLC dba Cabinets by Graber, Inc. relating to the construction and operation of the following emission units and pollution control devices at this existing wooden cabinet surface coating and composite counter top manufacturing source:

- (a) One (1) paint booth, identified as PB4, utilizing airless spray guns to coat a maximum of 2.79 wood units per hour, utilizing dry filters for particulate control, exhausting to stack P4;
- (b) One (1) natural gas fired air make-up unit with a heat input rating of 2.9 million British thermal units (MMBtu) per hour; and
- (c) Five (5) natural gas fired radiant tube heaters each having a heat input rating of 0.15 MMBtu per hour.

History

On February 11, 2003, Tippman - Graber Cabinet Co. LLC dba Cabinets by Graber, Inc. submitted an application to the OAQ requesting to add one (1) additional paint booth that will be used to apply a new finish to the wood products manufactured at the source. This new booth will be combined with the three (3) existing booths such that they are in series and the maximum production rate to the coating operating remains unchanged at 2.79 wood products per hour. Tippman - Graber Cabinet Co. LLC dba Cabinets by Graber, Inc. was issued Minor Source Operating Permit (MSOP) No. 003-11152-00304 on October 26, 1999.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

The source was issued MSOP 003-11152-00304 on October 26, 1999. The source has since received the following approvals:

- (a) Exemption No.: 003-11747-00304, issued on February 2, 2000; and
- (b) First Notice Only Change No.: 030-16565-00304, issued on October 4, 2002.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
P4	Paint Booth PB4	20	2	8000	ambient

Recommendation

The staff recommends to the Commissioner that the Minor Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 11, 2003. Additional information was received on March 10, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (three (3) pages).

Potential To Emit Before Controls for the Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the potential to emit (PTE) before controls for the modification. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.63
PM-10	0.72
SO ₂	0.01
VOC	7.29
CO	1.20
NO _x	1.58

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Xylene	0.63
Toluene	1.25
Ethyl Benzene	0.22
Formaldehyde	0.04
Methanol	0.71
Methyl Ethyl Ketone (MEK)	0.28
Methyl Isobutyl Ketone (MIBK)	0.28
miscellaneous HAPs from natural gas combustion	0.03
TOTAL	3.44

Justification for Revision

The MSOP is being revised through a MSOP Minor Permit Revision. The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of volatile organic compounds (VOC) is less than 25 tons per year. However, pursuant to 326 IAC 2-6.1-6(g)(1) any modification that would reduce the frequency of any monitoring or reporting requirement by a permit condition or applicable requirement. This permit modification results in such revisions to existing monitoring conditions.

County Attainment Status

The source is located in Allen County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Allen County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD applicability.

Actual Emissions

No previous emission data has been received from the source.

Existing Source Status

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.37
PM10	0.37
SO ₂	1.20
VOC	28.64
CO	0.08
NO _x	0.34
Single HAP	5.14 (toluene)
Combination HAPs	13.80

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- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon the Technical Support Document to MSOP 003-11152-00304, issued on October 26, 1999.

Potential to Emit of Revision After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this source revision.

	Potential to Emit of Revision After Issuance (tons/year)						
Process/emission unit	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Paint Booth PB4	0.60	0.60	0.00	7.20	0.00	0.00	1.25 (single) 3.41 (total)
Natural gas combustion	0.03	0.12	0.01	0.09	1.20	1.58	0.03
Total PTE for the Revision	0.63	0.72	0.01	7.29	1.20	1.58	3.44
PSD Threshold Level	250	250	250	250	250	250	N/A

	Potential to Emit (PTE) of Source After Issuance (tons/year)						
Process/emission unit	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Existing Source PTE *	0.37	0.37	1.20	28.64	0.08	0.34	5.14 (single) 13.80 (total)
Total PTE for Source after Issuance	1.00	1.09	1.21	35.93	1.28	1.92	<10 (single) <25 (total)
Part 70 Threshold Level	100	100	100	100	100	100	10 (single) 25 (total)

* Based upon the Technical Support Document to MSOP 003-11152-00304, issued on October 26, 1999.

This modification to an existing minor stationary source is not major because the emission increase after the modification is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements continue to not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this approval, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and

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- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed revision.
- (b) 40 CFR Part 63, Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations)

This source is still not subject to the NESHAP for source categories, 326 IAC 20-14, (40 CFR 63, Subpart JJ), *National Emission Standards for Wood Furniture Manufacturing Operations*, for its wood furniture coating processes since the source is not a major source of hazardous air pollutants pursuant to 40 CFR Part 63.2. The source does not have a potential to emit single and combined HAPs at 10 tons per year (tpy) and 25 tpy, respectively. Therefore this rule does not apply to the source.

There are still no National Emission Standards for Hazardous Air Pollutants (NESHAPs) for source categories (326 IAC 20 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

There are no new state rules applicable to the entire source during this revision review process.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT).

New paint booth PB4 does have the PTE single and combined HAPs in respective amounts of 10 tons and 25 tons per 12 consecutive month period. Therefore, the requirements of 326 IAC 2-4.1-1 do not apply to this revision.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Particulate from the surface coating at PB4 shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

- (a) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (b) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

Since new PB4 is being added to the existing configuration of PB1, PB2, and PB3 in series, these same requirements shall apply to these four (4) paint booths.

The source shall comply with this requirement by installing a dry filter at PB4, and continuing to operate the dry filters for PB1, PB2, and PB3, for particulate control.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

The source will use the airless spray application method in paint spray booth PB4, therefore the source is in compliance with this requirement.

Testing Requirements

While IDEM may require compliance testing at any specific time to determine if the source is in compliance with an applicable limit or standard, compliance testing is not required for this revision since the coating material usage and related VOC and volatile organic HAP emissions continue to assume an emission factor of 2,000 pounds of pollutant emitted per ton of pollutant input to the coating operation.

Compliance Requirements

There are no new compliance monitoring requirements due to this revision.

Changes to the Minor Source Operating Permit (MSOP) Due to This Revision:

The following changes are made as the first minor permit revision to MSOP No. 003-11152-00304. New language is shown in **bold** and deleted language is shown with a ~~line through it~~ for emphasis). The Table of Contents is also revised as necessary, without replication herein.

1. Section A.2 is revised to add the new facilities included in this approval. The Sections D.1 and D.2 facility description boxes are likewise revised.

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) ~~Three (3)~~ **Four (4)** paint booths, identified as **PB1, PB2 and PB3, constructed in October 1999, and PB4, to be constructed in April 2003, each equipped with,** utilizing airless spray guns, ~~to coating a combined~~ maximum of 2.79 wood units per hour, utilizing dry filters for particulate **overspray** control, **and each exhausting from one stack respectively identified as paint booths P1, and P2, to stack P1 and exhausting from paint booth P3 to stack P2 and P4;**
- (b) one (1) counter top manufacturing operation, consisting of the following:
 - (1) six (6) forming tables for pouring resins;
 - (2) sanding and trimming area, utilizing an air purifier for particulate control.
- (c) Three (3) No. 1 distillate oil fueled heaters, identified as H1, H2, and H3, each rated at 0.125 million British thermal units (MMBtu) per hour, each exhausting at one (1) stack, identified as H1, H2, and H3, respectively;
- (d) One (1) No. 1 distillate oil fueled dryer, identified as D4, rated at 0.165 million British thermal units (MMBtu) per hour, exhausting at one (1) stack, identified as D4;
- (e) Miscellaneous saws/sanders/wood trimming equipment, with a maximum capacity of 100 pounds per hour off wood, utilizing a baghouse and cyclone collection system for particulate control and exhausting to the interior of the building;

- (f) one (1) propane unit heater with a maximum heat input rate of 0.175 million British Thermal Units per hour;
- (g) **One (1) natural gas fired air make-up unit with a heat input rating of 2.9 million British thermal units (MMBtu) per hour; and**
- (h) **Five (5) natural gas fired radiant tube heaters each having a heat input rating of 0.15 MMBtu per hour.**

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) ~~Three (3)~~ **Four (4)** paint booths, identified as **PB1, PB2 and PB3, constructed in October 1999, and PB4, to be constructed in April 2003, each equipped with**, utilizing airless spray guns, to coating a **combined** maximum of 2.79 wood units per hour, utilizing dry filters for particulate **overspray** control, **and each** exhausting from **one stack respectively identified as paint booths P1, and P2, to stack P1 and exhausting from paint booth P3 to stack P2 and P4;**
- (b) one (1) counter top manufacturing operation, consisting of the following:
 - (1) six (6) forming tables for pouring resins
 - (2) sanding and trimming area, utilizing an air purifier for particulate control.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (c) Three (3) No. 1 distillate oil fueled heaters, identified as H1, H2, and H3, each rated at 0.125 million British thermal units (MMBtu) per hour, each exhausting at one (1) stack, identified as H1, H2, and H3, respectively;
- (d) One (1) No. 1 distillate oil fueled dryer, identified as D4, rated at 0.165 million British thermal units (MMBtu) per hour, exhausting at one (1) stack, identified as D4;
- (e) Miscellaneous saws/sanders/wood trimming equipment, with a maximum capacity of 100 pounds per hour off wood, utilizing a baghouse and cyclone collection system for particulate control and exhausting to the interior of the building;
- (f) One (1) propane unit heater with a maximum heat input rate of 0.175 million British Thermal Units per hour;
- (g) **One (1) natural gas fired air make-up unit with a heat input rating of 2.9 million British thermal units (MMBtu) per hour; and**
- (h) **Five (5) natural gas fired radiant tube heaters each having a heat input rating of 0.15 MMBtu per hour.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

2. Existing Conditions D.1.2 and D.1.4 are revised to include reference to new paint booth PB4.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the ~~three (3)~~ **four (4)** paint booths, identified as PB1, PB2, ~~and PB3, and PB4~~ shall utilize one of the following application methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for , the ~~three (3)~~ **four (4)** paint booths, identified as **PB1, PB2, and PB3, and PB4**, and any control devices.

3. Conditions D.1.3, D.1.6, D.1.7 are removed from the permit, and a new Condition D.1.3 is added to the permit to incorporate the 326 IAC 6-3 rule revisions that became effective on June 12, 2002, for the surface coating facilities, including new paint booth PB4. Also, Condition D.1.5 (Testing) is removed from the permit since it is affected by this revision, but is only informational in nature and is not necessary in the permit.

D.1.3 ~~Particulate Matter (PM) [326 IAC 6-3-2(c)]~~

~~Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the three (3) paint booths, identified as P1, P2 and P3 shall be limited by the following:~~

~~Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:~~

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.1.5 ~~Testing Requirements [326 IAC 2-1.1-11]~~

~~The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.~~

D.1.6 ~~Particulate Matter (PM)~~

~~The dry filters for PM control shall be in operation at all times when the three (3) paint booths, identified as P1, P2 and P3 are in operation.~~

D.1.7 ~~Monitoring~~

~~(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks P1 and P2 while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

~~(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

~~———— (c) ——— Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.~~

D.1.3 Particulate [326 IAC 6-3-2(d)]

- (a) Particulate from the surface coating at PB1, PB2, PB3, and PB4 shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.**
 - (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:**
 - (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.**
 - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.**
 - (c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.**
4. The record keeping requirements of Condition D.1.8 are eliminated due to the rule changes made to 326 IAC 6-3 as discussed under change No. 3 above.

~~D.1.8 Record Keeping Requirements~~

- ~~———— (a) ——— To document compliance with Condition D.1.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.~~
- ~~———— (b) ——— All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.~~

5. This revision request results in a change to the equipment listing at Section D.2. As such, Condition D.2.1 is updated to incorporate the revisions to 326 IAC 6-3 that became effective on June 12, 2002.

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2(e)]

Pursuant to 326 IAC 6-3-2 (~~Process Operations~~ **Particulate Emission Limitations for Manufacturing Processes**), the allowable ~~PM~~ **particulate** emission rate from the miscellaneous saws/sanders/wood trimming equipment shall not exceed 0.55 pounds per hour when operating at a process weight rate of 100 pounds per hour.

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Conclusion

This proposed revision to this wooden cabinet surface coating and composite counter top manufacturing source shall be subject to the conditions of the attached MSOP Minor Permit Revision No. 003-16798-00304.

**Appendix A: Emission Calculations
Natural Gas Combustion**

Company Name: Tippman - Graber Cabinet Co. LLC
dba Cabinets by Graber, Inc.
Address City IN Zip: 15202 Grabill Road, Grabill, IN 46741
MSOP No.: 003-11152-00304
Minor Permit Revision No: 003-16798-00304
Reviewer: Michael Hirtler / EVP
Date: March 2003

Combustion Unit Type	Total Capacity MMBtu/hr	Potential Thruput MMCF/yr	Emission Factor in lb/MMCF						Potential Emission Rate in tons/year					
			PM*	PM10*	SO2	NOx**	VOC	CO***	PM	PM10	SO2	NOx	VOC	CO
5 radiant tube heaters (each 0.15 MMBtu/hr)	0.75	6.57	1.9	7.6	0.6	94.0	5.5	40.0	0.01	0.02	0.00	0.31	0.02	0.13
1 air make-up unit	2.90	25.40	1.9	7.6	0.6	100.0	5.5	84.0	0.02	0.10	0.01	1.27	0.07	1.07
Uncontrolled Potential to Emit: (tons per year)	3.65	31.97							0.03	0.12	0.01	1.58	0.09	1.20

Methodology

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 94 for heat input capacity < 0.3 MMBtu/hr; = 100 for heat input capacity =>0.3 MMBtu/hr

**Emission Factors for CO: Uncontrolled = 40 for heat input capacity < 0.3 MMBtu/hr; = 84 for heat input capacity =>0.3 MMBtu/hr

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPL. D 7/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Potential Hazardous Air Pollutant (HAP) Emissions

Emission Factor in lb/MMcf	HAPs - Organics			HAPs - Metals							Total all HAPs (tons/yr)
	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	
Potential Emission all combustion units (tons per year):	3.357E-05	1.918E-05	1.199E-03	2.878E-02	5.436E-05	7.994E-06	1.759E-05	2.238E-05	6.075E-06	3.357E-05	3.017E-02

Methodology

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

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Company Name: Tippman - Graber Cabinet Co. LLC
dba Cabinets by Graber, Inc.
Address City IN Zip: 15202 Grabill Road, Grabill, IN 46741
MSOP No.: 003-11152-00304
Minor Permit Revision No: 003-16798-00304
Reviewer: Michael Hirtler / EVP
Date: March 2003

Coating Material & Facility	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum * (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency
<i>Paint Booth PB4 (Wood Cabinet Coating)</i>																
6501 Sealer	7.52	70.14%	0.0%	70.1%	0.0%	22.08%	0.0326	2.79	5.27	5.27	0.48	11.52	2.10	0.22	23.89	75%
6530 Top Coat	7.91	60.16%	0.0%	60.2%	0.0%	31.30%	0.0251	2.79	4.76	4.76	0.33	7.99	1.46	0.24	15.20	75%
1048 Catalyst	8.98	42.43%	0.0%	42.4%	0.0%	42.34%	0.0075	2.79	3.81	3.81	0.08	1.92	0.35	0.12	9.00	75%
16-8469 Stain	6.69	88.13%	0.0%	88.1%	0.0%	8.89%	0.0075	2.79	5.90	5.90	0.12	2.97	0.54	0.02	66.32	75%
PS 125 Thinner	6.90	100.00%	0.0%	100.0%	0.0%	0.00%	0.0326	2.79	6.90	6.90	0.63	15.07	2.75	0.00	ERR	75%
Total Uncontrolled Potential to Emit from PB4:											1.64	39.48	7.20	0.60		
Total Controlled/Limited Potential to Emit from PB4:									12-mos Input Usage Limit (VOC)	Control Efficiency (PM)	Controlled VOC lbs per Hour	Controlled VOC lbs per Day	Controlled VOC tons per Year	Controlled PM tons/yr		
									0.00%	94.00%	1.64	39.48	7.20	0.04		

Methodology:

* New PB4 will be added to existing booths PB1-PB3 which are in series. The maximum units per hour reflects the total for the four (4) booths, but the emissions and material usage for PB4 reflect the equivalent of 0.7 units per hour, or 1/4 of the 2.79 units per hour.

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids) * Transfer Efficiency

Total = Sum of Worst Coatings per booth + Sum of all solvents used

Controlled VOC Emission Rate = Uncontrolled Emission Rate * (1 - VOC Input Limitation)

Controlled PM Emission Rate = Uncontrolled Emission Rate * (1 - Control Efficiency)

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Tippman - Graber Cabinet Co. LLC
dba Cabinets by Graber, Inc.
Address City IN Zip: 15202 Grabill Road, Grabill, IN 46741
MSOP No.: 003-11152-00304
Minor Permit Revision No: 003-16798-00304
Reviewer: Michael Hirtler / EVP
Date: March 2003

Coating Material & Facility	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % xylene	Weight % toluene	Weight % ethylbenzene	Weight % formaldehyde	Weight % methanol	Weight % MEK	Weight % MEK	Weight %	Weight %	HAP Emission Rates (tons per year)									
													xylene	toluene	ethylbenzene	formaldehyde	methanol	MEK	MEK			Total All HAPs
<i>Paint Booth PB4 (Wood Cabinet Coating)</i>																						
6501 Sealer	7.52	0.0326	2.79	10.00%	5.00%	5.00%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.30	0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.60
6530 Top Coat	7.91	0.0251	2.79	13.70%	0.00%	3.00%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.33	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.41
1048 Catalyst	8.98	0.0075	2.79	0.00%	0.00%	0.00%	0.00%	19.50%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.16
16-8469 Stain	6.69	0.0075	2.79	0.00%	0.00%	0.00%	0.00%	6.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.04
PS 125 Thinner	6.90	0.0326	2.79	0.00%	40.00%	0.00%	0.00%	20.00%	10.00%	10.00%	0.00%	0.00%	0.00	1.10	0.00	0.00	0.55	0.28	0.28	0.00	0.00	2.20
Total Uncontrolled Potential to Emit from PB4:													0.63	1.25	0.22	0.04	0.71	0.28	0.28	0.00	0.00	3.41
Total Controlled/Limited Potential to Emit from PB4:													0.63	1.25	0.22	0.04	0.71	0.28	0.28	0.00	0.00	3.41

Methodology:

Uncontrolled Potential HAP Emission Rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Limited Potential HAP Emission Rate (tons/yr) = Uncontrolled Potential HAP Emission Rate * Coating Material Input Limit (such that single HAP emissions <10 tpy and total HAP emissions < 25 tpy)